

BookletChartTM

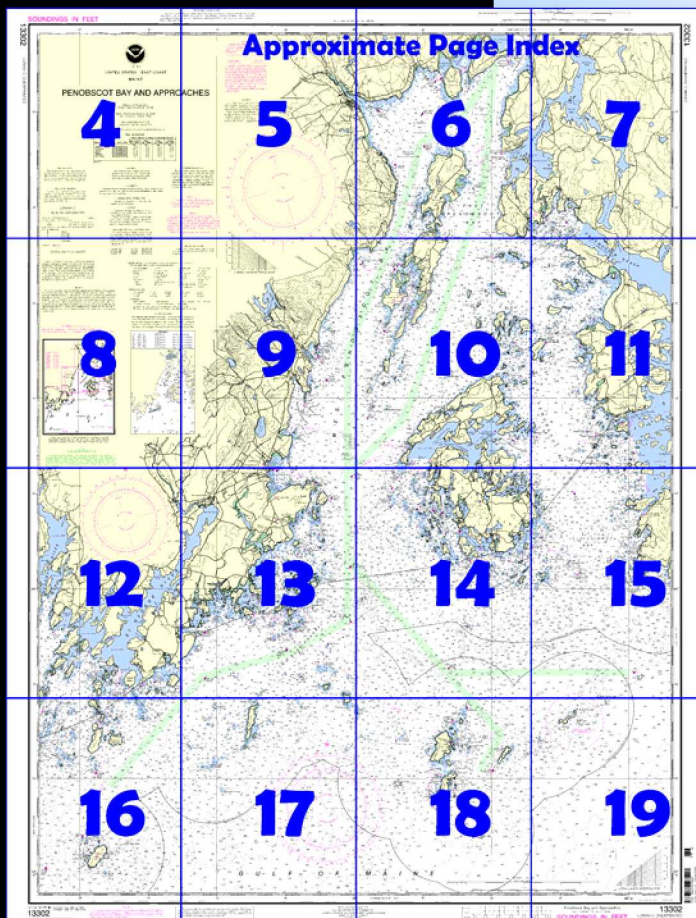
Penobscot Bay and Approaches

(NOAA Chart 13302)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

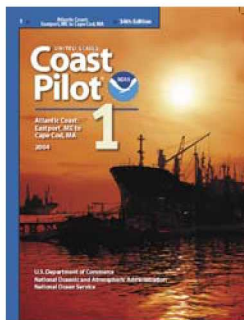
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 1, Chapter 7 excerpts]

(111) **Penobscot Bay**, the largest and most important of the many indentations on the coast of Maine, is about 20 miles wide from Isle au Haut on the east to Whitehead Island on the west and 28 miles long from its entrance to the mouth of Penobscot River. A chain of large and small islands divides the bay into two parts, **East Penobscot Bay** and **West Penobscot Bay**. The southern part of East Penobscot Bay is Isle au Haut Bay.

Vinalhaven Island and North Haven Island

are large islands dividing the southern part of the bay. Islesboro Island divides the bay near its head. Numerous harbors indent the shores of Penobscot Bay, the most important being Rockland, Rockport, Camden, Belfast, and Searsport on the western shore; Castine and Stonington on the eastern shore; and Vinalhaven and North Haven in the center of the bay. The bay is the approach to Penobscot River, on which are several

towns and the city of Bangor at the head of navigation. The bay ports collectively are among the leaders for the lobstering industry in Maine. (112) The sea approaches to the bay are well marked by the lights on Monhegan Island and Matinicus Rock; the entrance is marked by Saddleback Ledge Light on the east and by Whitehead and Two Bush Island Lights on the west side of the bay. The harbors are well lighted, and the more important dangers are marked by buoys or daybeacons. Deep-draft vessels ply the bay throughout the year and recreational vessels are prevalent during the summer. In severe winters many of the harbors are obstructed by ice. The Penobscot River seldom is entirely closed by it as icebreakers usually keep the channel free. The thorofares are only occasionally obstructed by ice and are much used by small vessels bound along the coast.

(113) Penobscot Bay, a region of rocks and ledges, requires extreme caution in navigating. After unusually high tides many logs are present in the bay, particularly from Belfast northward. These logs are dangerous to small craft. Penobscot Bay can be entered from eastward through Eggemoggin Reach, Deer Island Thorofare, or Merchant Row, and from westward through Muscle Ridge Channel or Two Bush Channel.

(115) The preceding paragraphs give the simplest directions by pointing out the difficulties and the dangers, and especially, when necessary, the need for local knowledge. The channels are well buoyed, most of the dangers well marked, and the approaches clear. No difficulty should be experienced in approaching and entering the bay in clear weather with the aid of the chart and by following the aids.

(116) Two vessel-to-vessel **oil transfer anchorage areas** near the head of Penobscot Bay north of Islesboro Island are discussed later in this chapter; indexed as Oil Transfer Anchorage Area.

(118) The U.S. Coast Guard Captain of the Port, Portland, in cooperation with the Maine and New Hampshire Port Safety Forum, has established a Recommended Vessel Route for deep draft vessels entering and departing Penobscot Bay and River. Deep draft vessels are requested to follow the designated routes. These routes were designed to provide safe, established routes for increased deep draft vessels, to prevent the loss of fishing gear placed in the waters in the approaches to Penobscot Bay and River, and to reduce the potential for conflicts between less maneuverable deep draft commercial vessels and all other vessels navigating upon these waters. Vessels are responsible for their own safety and are not required to remain inside the route nor are fisherman required to keep fishing gear outside of the 0.4 mile wide route.

(293) **Islesboro Island** and the adjacent islands and shoals are about 15 miles long, and separate East and West Penobscot Bays near their heads. Islesboro Island is nearly divided in the middle. The island is an important summer resort and is frequented by many pleasure boats in summer. Dark Harbor, Islesboro, North Islesboro, and Pripet are villages on the island. A State automobile and passenger ferry is operated between Lincolnville, on the mainland, and Grindle Point.

(294) A chain of islands and rocks, through which are several channels, extends for 5 miles southward from Islesboro Island. **McIntosh Ledge**, the most southerly of the dangers and about 0.7 mile southeastward of Robinson Rock, is awash at low water. A buoy is southeast of the ledge.

(295) **Robinson Rock**, 22 feet high and grassy, is the most southerly visible danger; several smaller bare rocks are around it. Ledges extend for 0.6 mile north-northeast and south-southwest of the rock. There is a whistle buoy off the southern end of these ledges.

(296) **Mark Island**, the most southerly wooded island, is high, rounded, and prominent. A daybeacon is on the reef, which extends southward from the island.

(298) **Lasell Island**, 1.2 miles northeast of Mark Island, is high and wooded except at its north end. **Goose Island** 13305 **Goose Island** and **Mouse Island**, eastward of Saddle and Lasell Islands, are rocky islets with grass on top. Several bare and covered rocks are between Goose and Mouse Islands. A buoy is 300 yards north of the ledge which uncovers 5 feet northward of Mouse Island, and a buoy is eastward of the bare rock east of Goose Island.

Corrected through NM Jun. 10/06
Corrected through LNM May 30/06

HEIGHTS

Elevations of rocks, bridges, landmarks and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Ellsworth, ME	KEC-93	162.40 MHz
Portland, ME	KDO-95	162.55 MHz
Dresden, ME	WXM-80	162.475 MHz

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.293" northward and 1.865" eastward to agree with this chart.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 1 for important supplemental information.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

○(Accurate location) ◦(Approximate location)

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 1. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in Concord, MA.
Refer to charted regulation section numbers.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

Chart 13302 is for use in the wide portions of Penobscot Bay and Approaches. Navigational aids are not shown on this chart in harbors and inside passages. Use large scale charts in navigating such areas.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

NOTE B
RECOMMENDED VESSEL ROUTE

Deep draft vessels entering and departing Penobscot Bay and River are requested to remain within the Recommended Vessel Route. Two-way traffic is possible within all parts of the green-tinted areas. Other vessels, while not excluded, should exercise caution in these areas and monitor VHF channel 16 or 13 for information concerning vessels transiting these areas. See U.S. Coast Pilot 1, Chapter 7.

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

COLREGS, 80.105 (see note A)

International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

TIDAL INFORMATION

Place (LAT/LONG)	Height referred to datum of soundings (MLLW)			
	Mean High Water	Mean High Water	Mean Low Water	Extreme Low Water
Name	feet	feet	feet	feet
Matinicus Harbor (43°52'N/68°53'W)	9.8	9.3	0.3	-3.5
Vinehaven (44°03'N/69°50'W)	10.1	9.6	0.3	-3.5
Casline (44°23'N/69°46'W)	11.0	10.5	0.4	-3.5
Belfast (44°26'N/69°00'W)	11.0	10.6	0.4	----
Rockland (44°06'N/69°06'W)	10.6	10.2	0.4	----
Port Clyde (43°56'N/69°16'W)	9.7	9.2	0.3	-3.5

(Apr 2006)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	OC occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
FI flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow
Bottom characteristics:			
Blds boulders	Co coral	gy gray	Oys oysters
bk broken	G gravel	h hard	so soft
Cy clay	Grs grass	M mud	Rk rock
			Sh shells
			S sand
			sy sticky
Miscellaneous:			
AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
2L Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

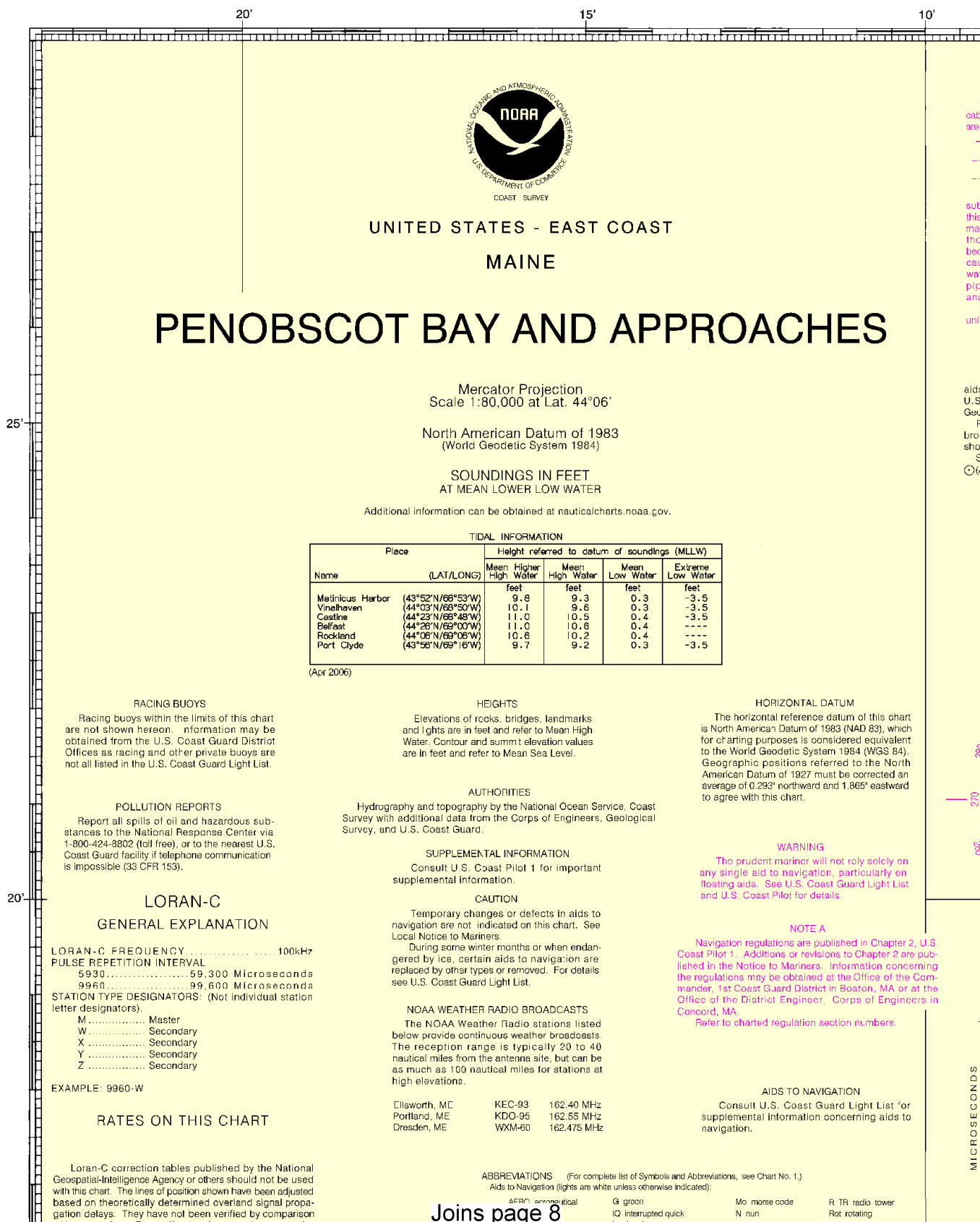
PRINT-ON-DEMAND CHARTS

This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

SOUNDINGS IN FEET

13302

LORAN-C OVERPRINTED



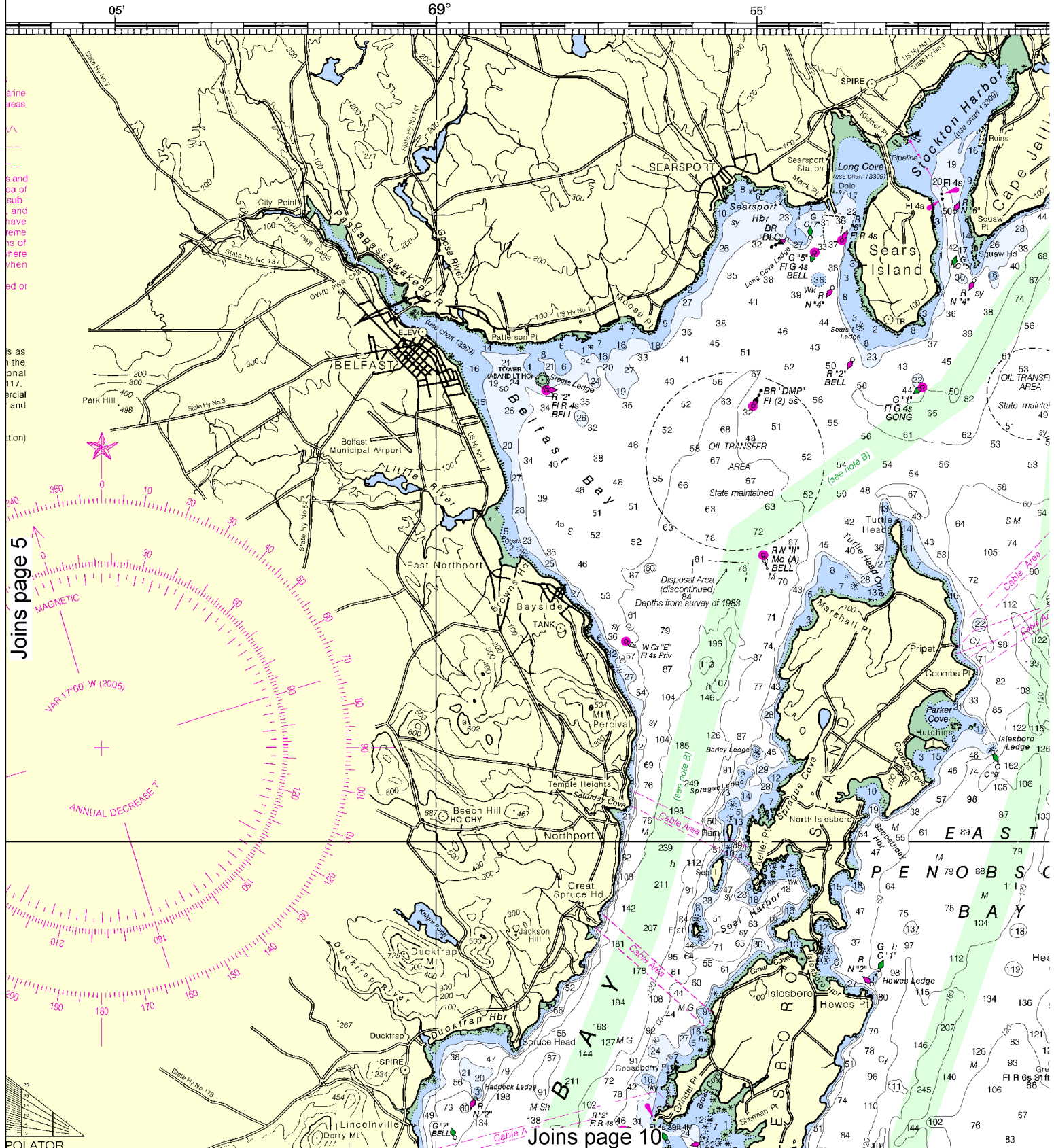
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Joins page 8



5



Joins page 5

Joins page 10

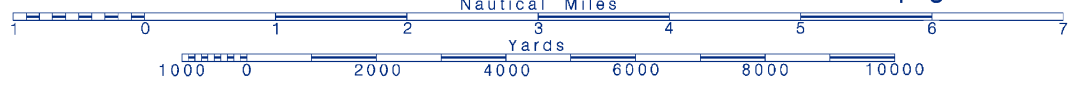
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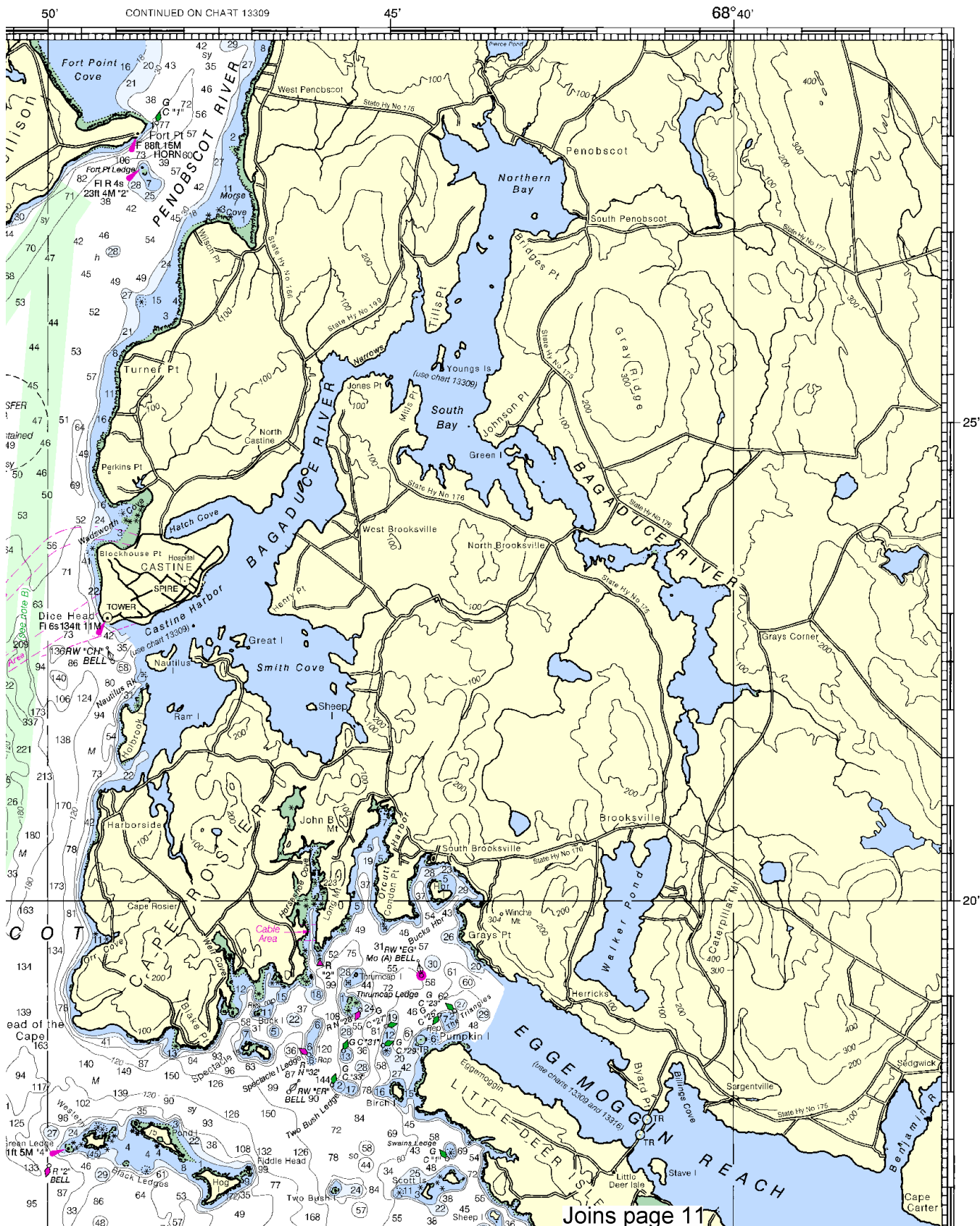
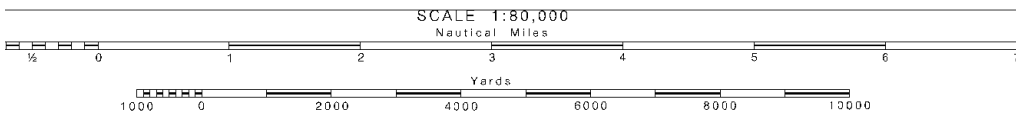


Printed at reduced scale.

SCALE 1:80,000

See Note on page 5.





This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,
 NGA Weekly Notice to Mariners: 0910 2/27/2010,
 Canadian Coast Guard Notice to Mariners: 1209 12/25/2009.

7

STATION TYPE DESIGNATIONS (Not individual station letter designators).

M Master
W Secondary
X Secondary
Y Secondary
Z Secondary

EXAMPLE: 9960-W

RATES ON THIS CHART

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on theoretically determined overland signal propagation delays. They have not been verified by comparison with survey data. Every effort has been made to meet the 1/4 nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

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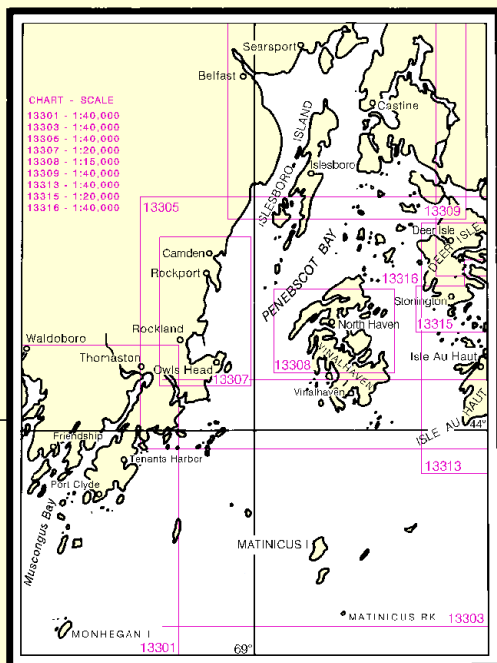


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NOTE B RECOMMENDED VESSEL ROUTE

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Joins page 4

AA WEATHER RADIO BROADCASTS

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Portland, ME KDO-95 162.55 MHz
Dresden, ME WXM-60 162.475 MHz

Office of the District Engineer, Corps of Engineers in Concord, MA.
Refer to charted regulation section numbers.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

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Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	OC occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R rod	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	Whs whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

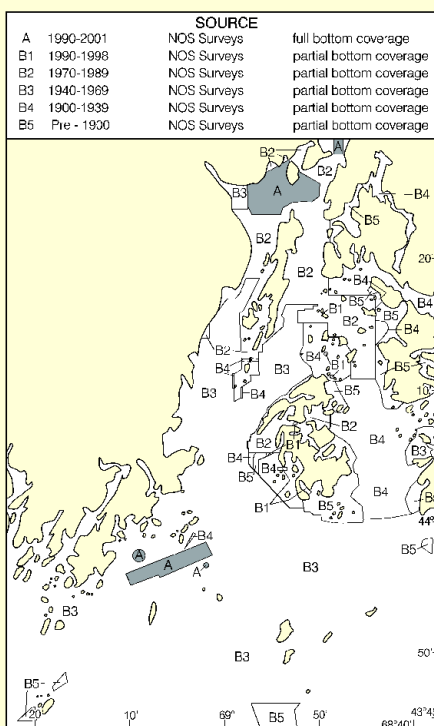
Blds boulders	Co cora	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Gr grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
21. Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

SOURCE DIAGRAM

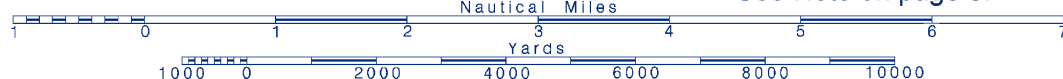
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.



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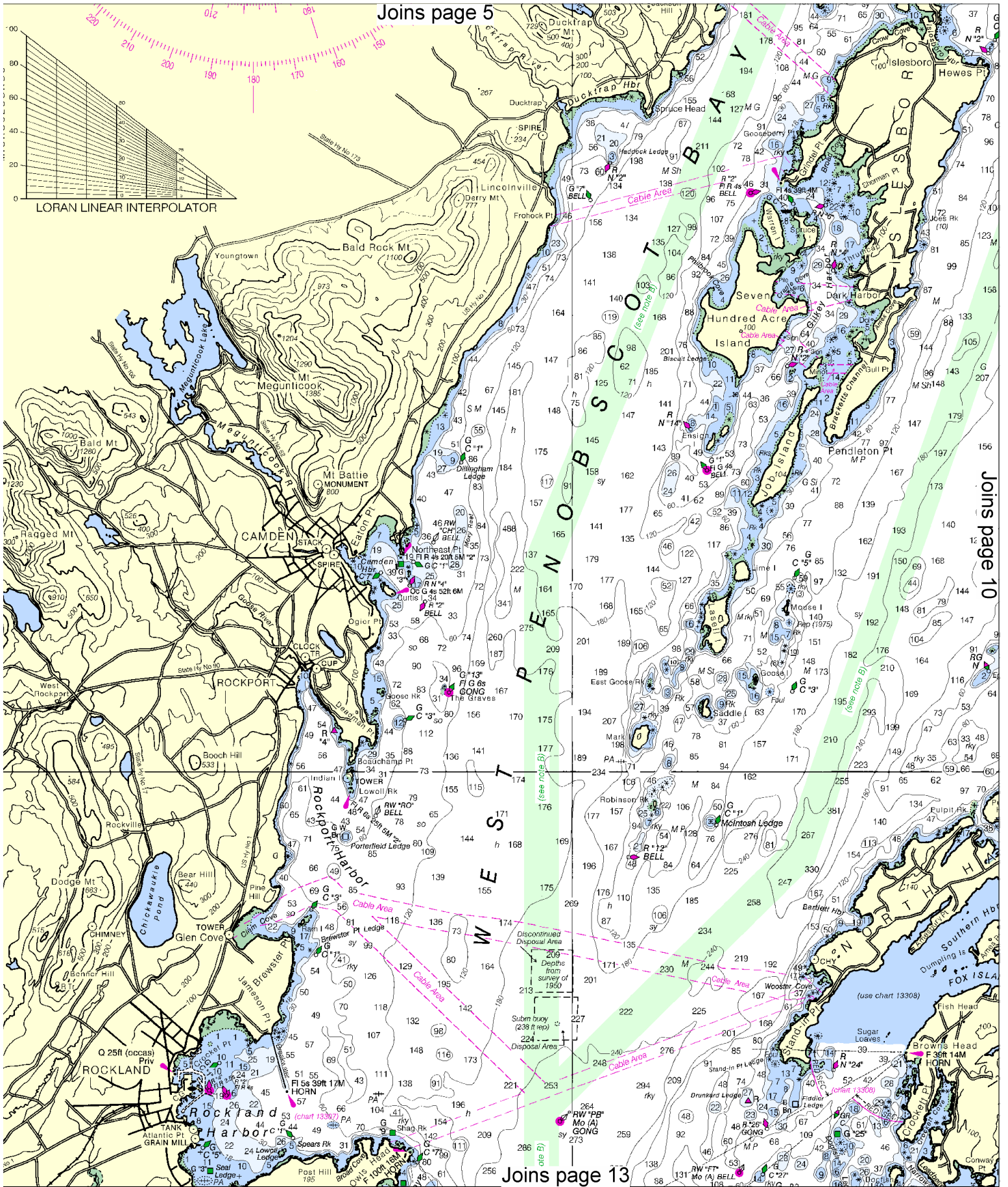
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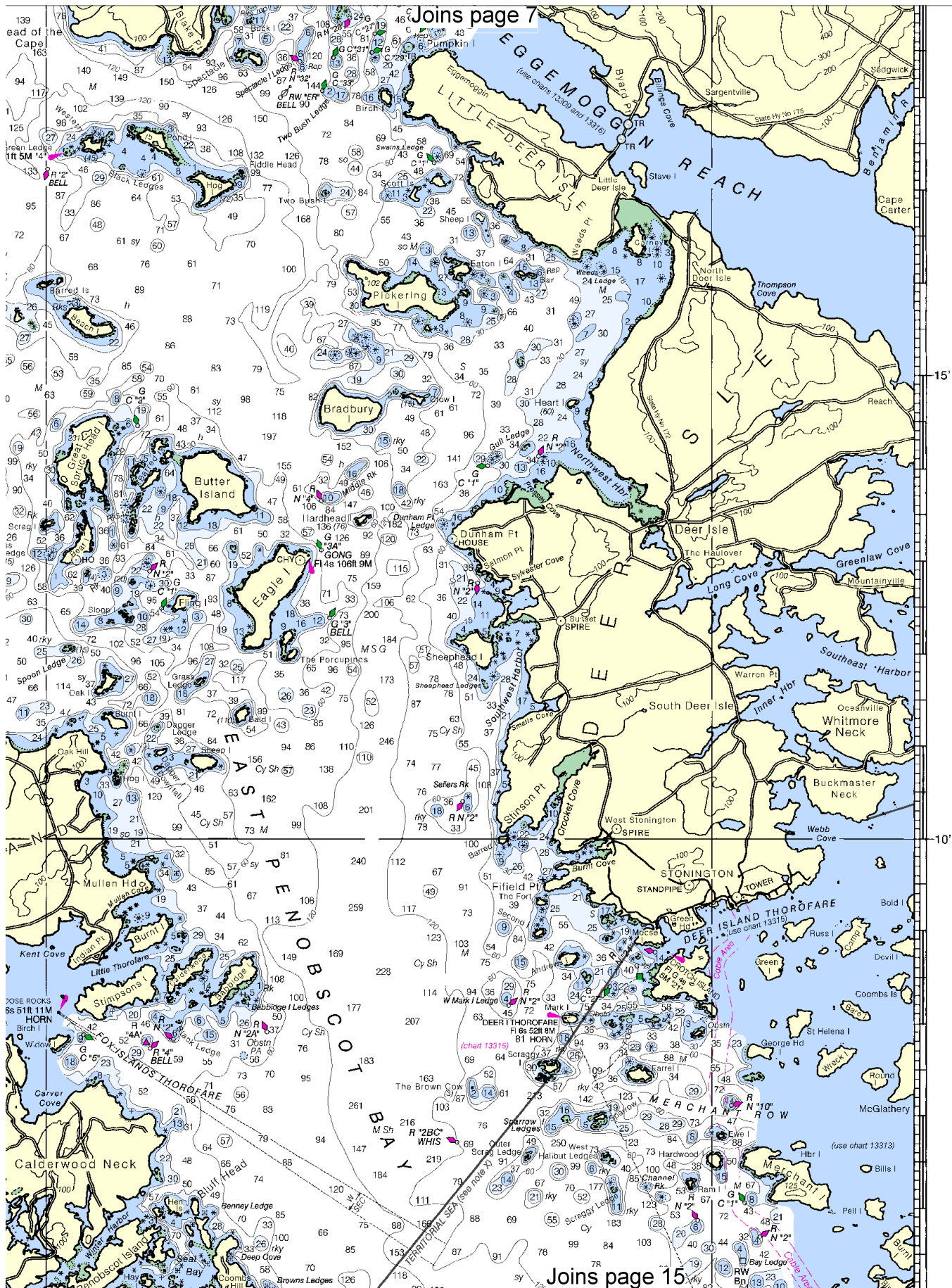
See Note on page 5.



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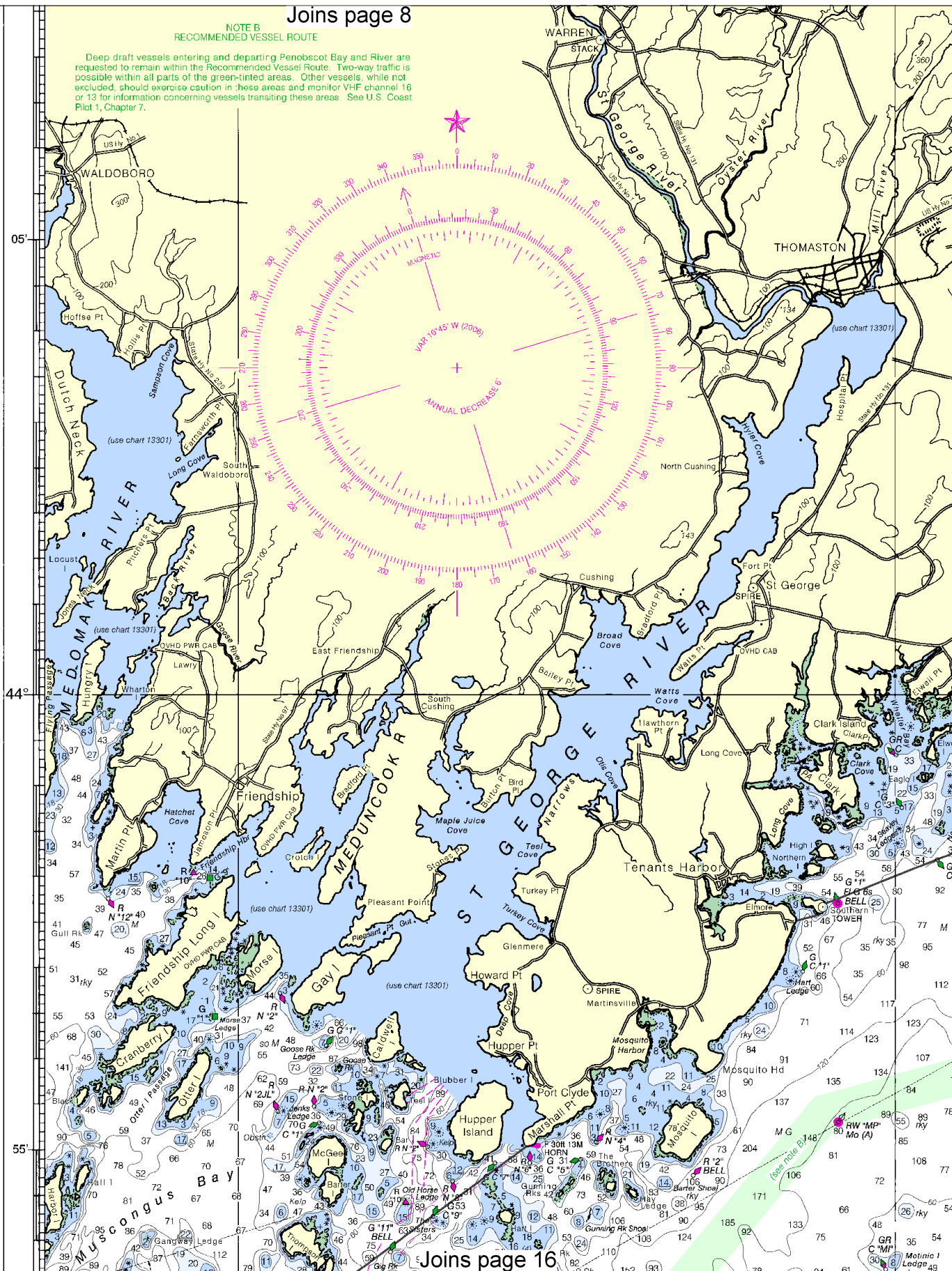
North





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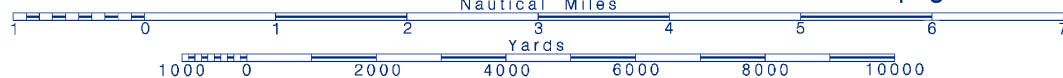


Joins page 16

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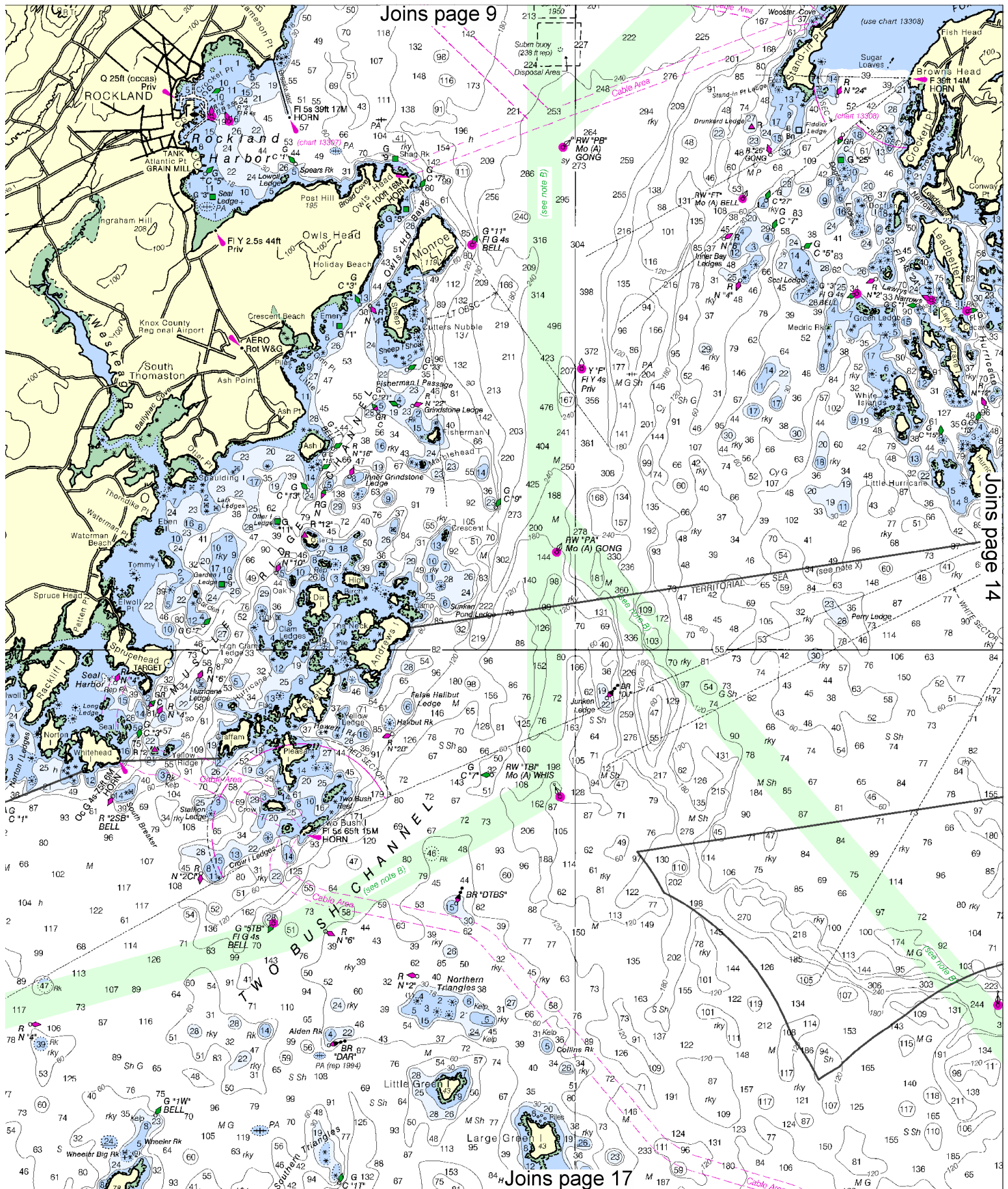
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Nautical Miles

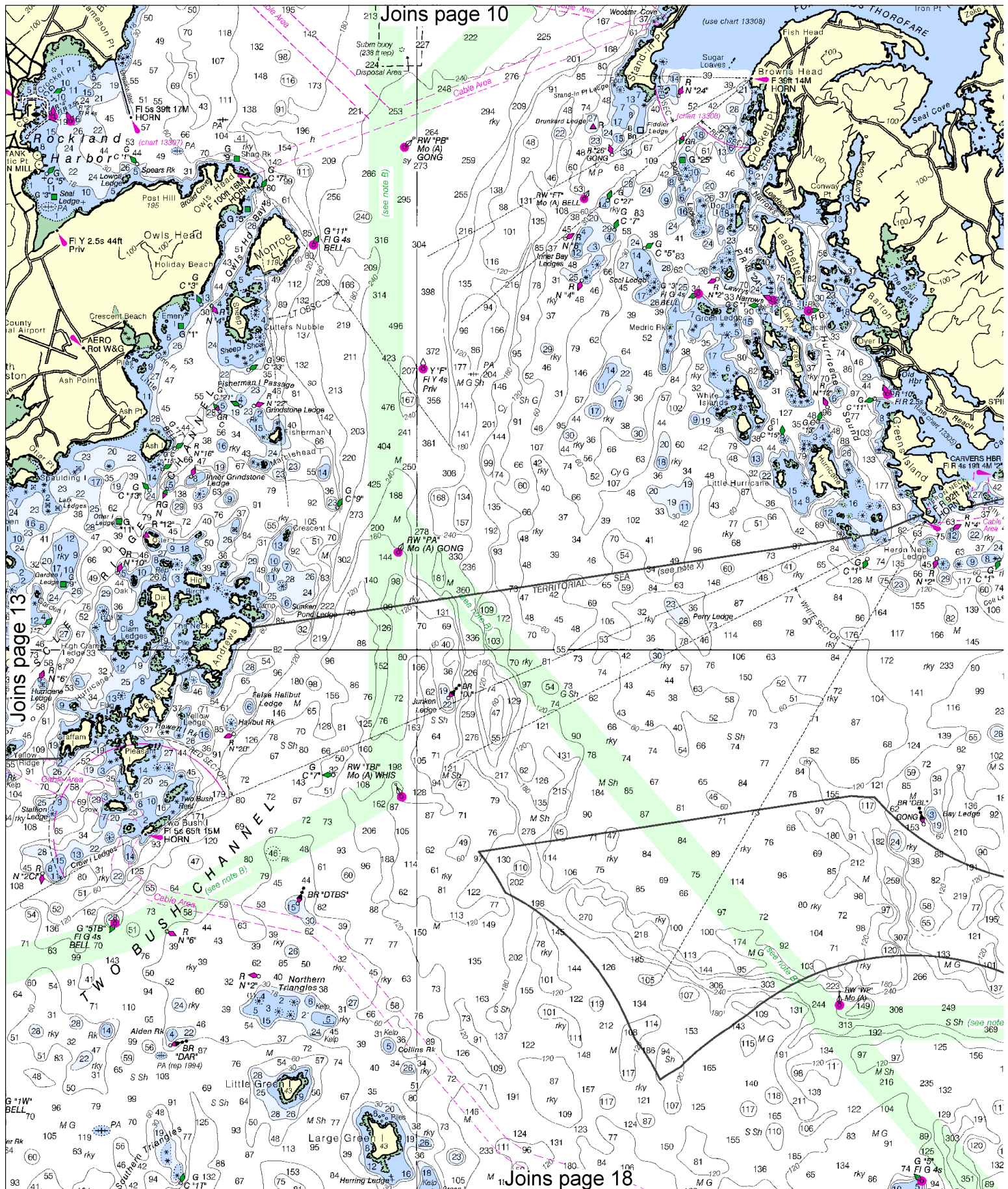
See Note on page 5.



12





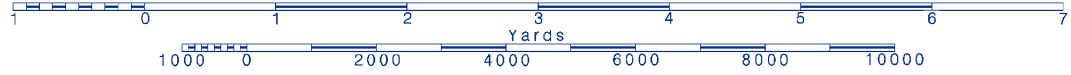


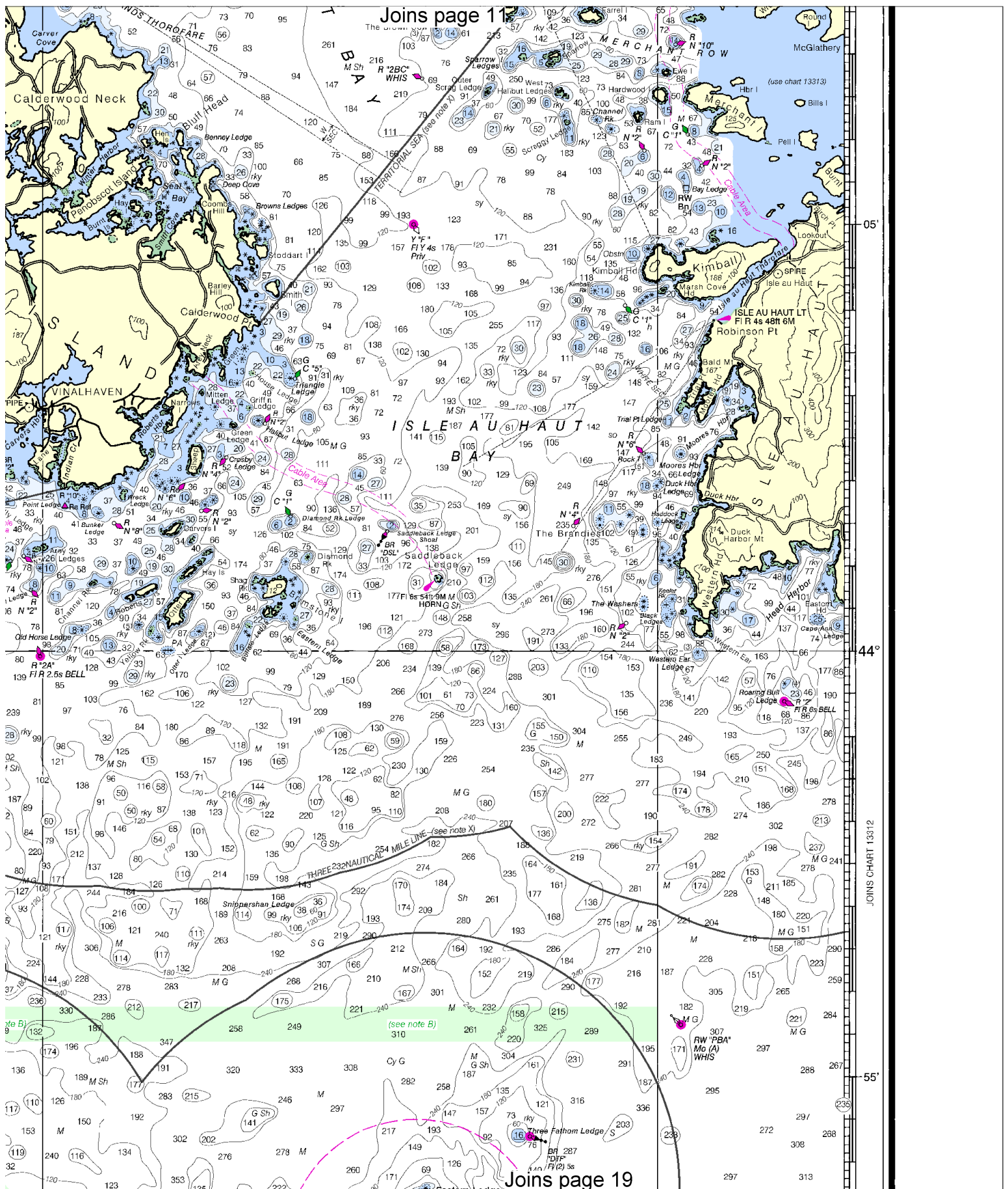
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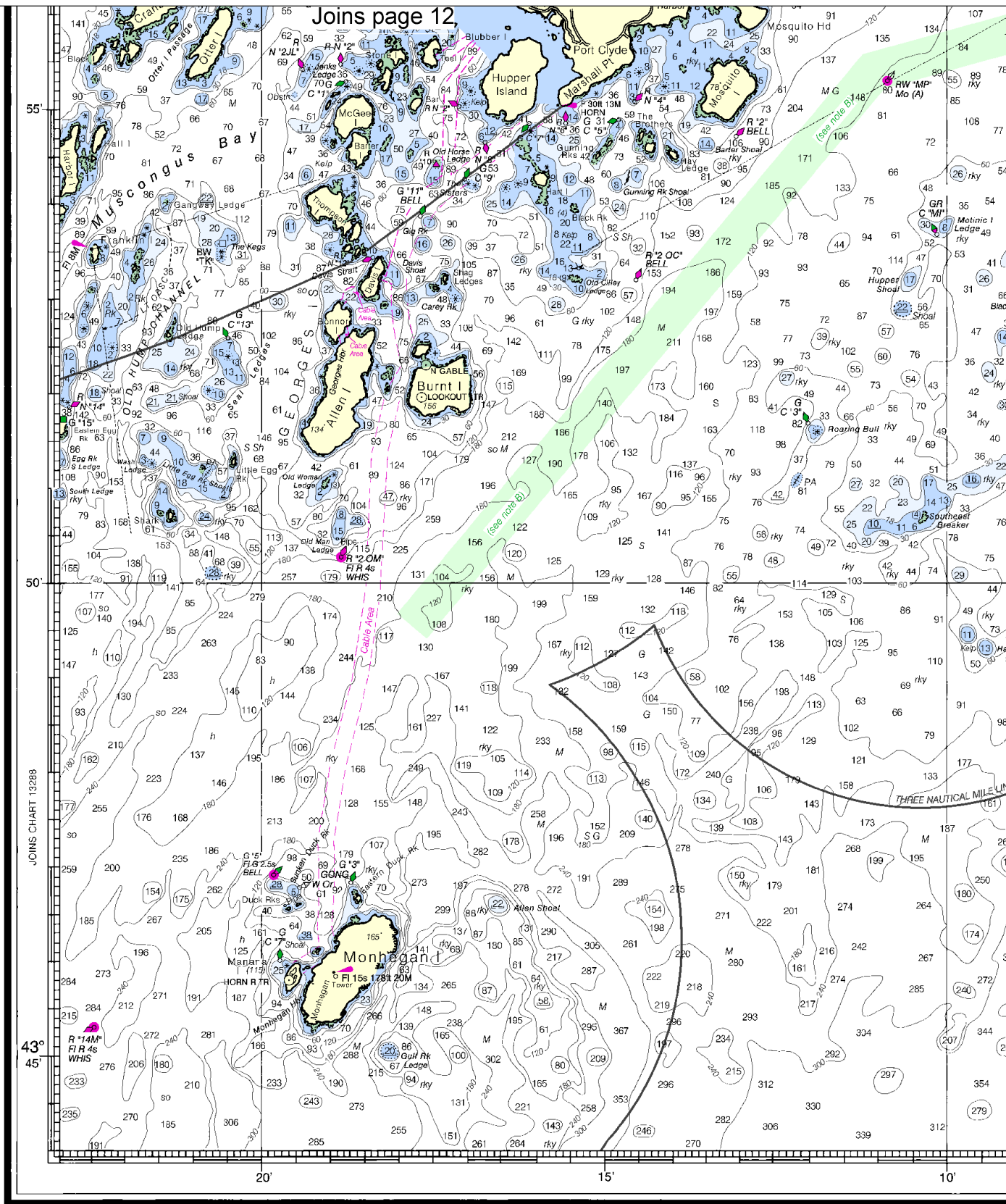


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See Note on page 5.







22nd Ed., Jun./06 ■ Corrected through NM Jun. 10/06
 Corrected through LNM May 30/06
13302
 LORAN-C OVERPRINTED

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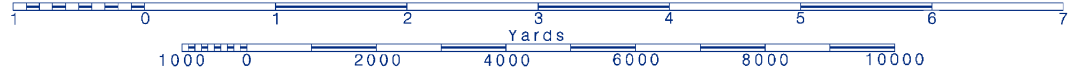
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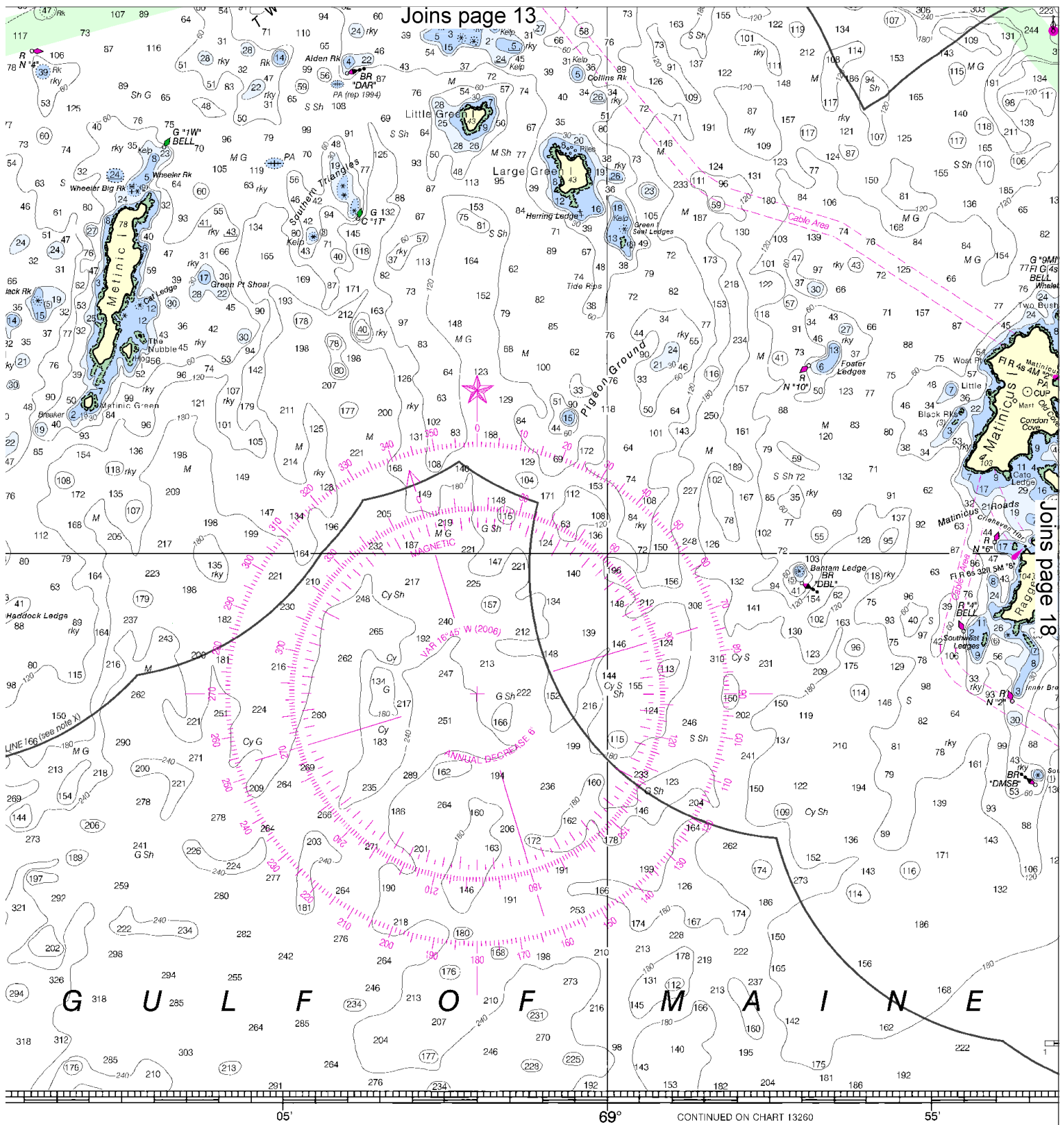


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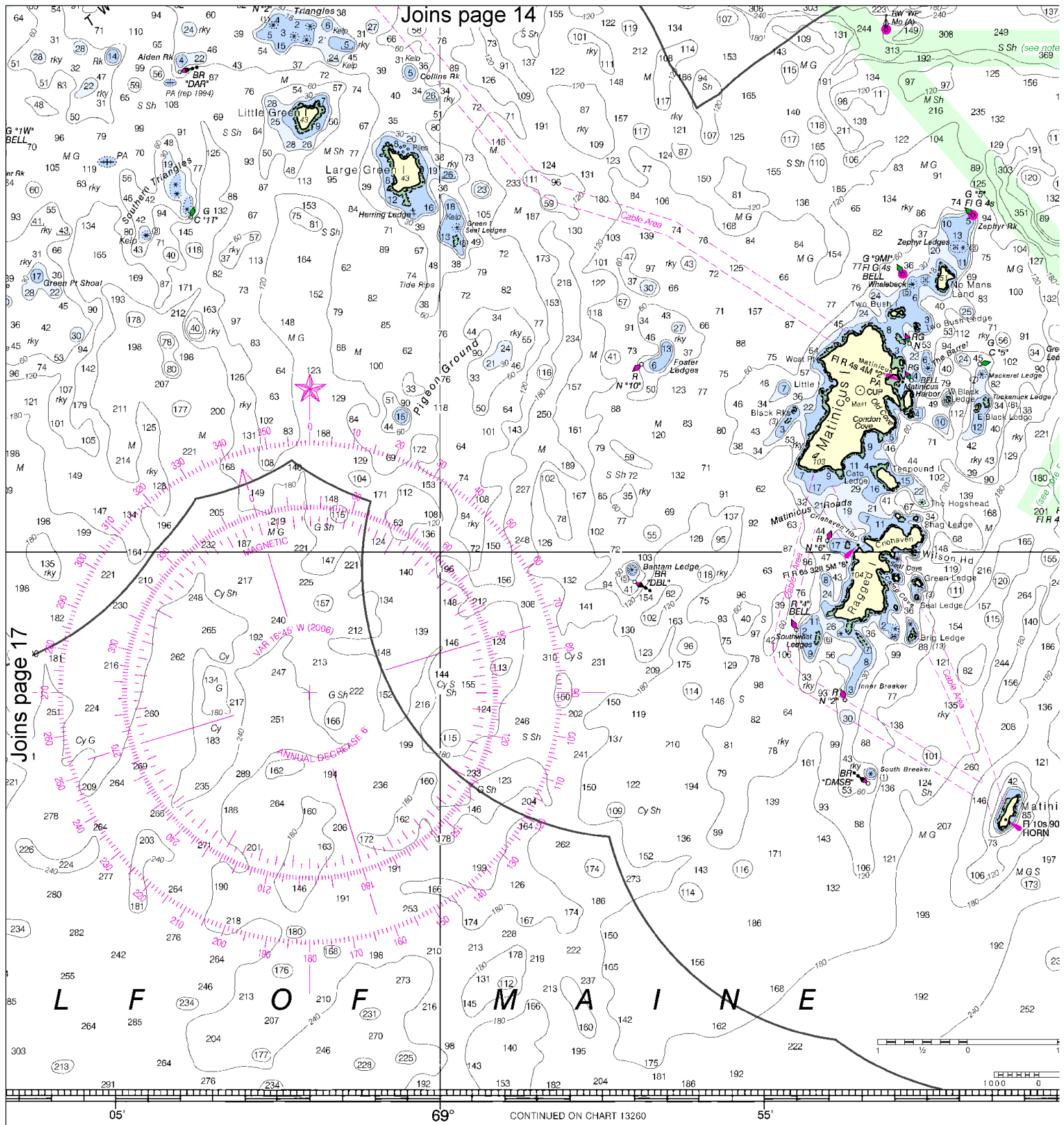
SCALE 1:80,000
 Nautical Miles

See Note on page 5.





safe navigation. The National
additions, or comments for
n (N/CS2), National Ocean



Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	1	2	3
FEET	6	12	18
METERS	1	2	3

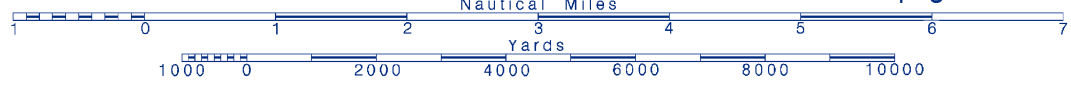
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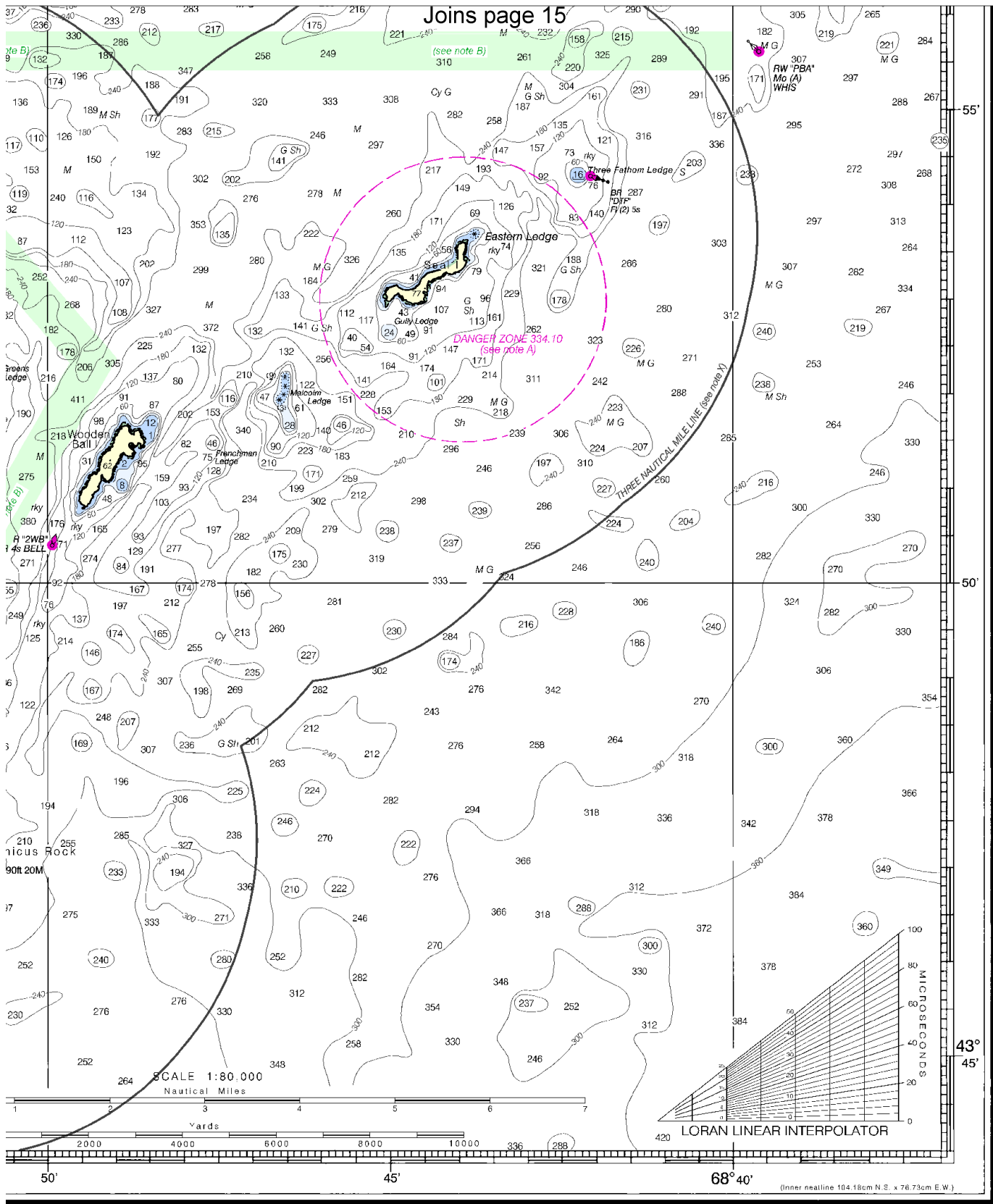


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SCALE 1:80,000

See Note on page 5.





ED. NO. 22



NSN 7642014010441
NGA REFERENCE NO. 13BHA13302

3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
3	6	7	8	9	10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34

Penobscot Bay and Approaches
SOUNDINGS IN FEET - SCALE 1:80,000
SOUNDINGS IN FEET

13302
LORAN-C OVERPRINTED

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard South Portland – 207-767-0363/0303

Coast Guard Boothbay Harbor – 207-633-2643

Coast Guard Rockland – 207-596-6666

Maine Marine Patrol – 207-657-3030/800-452-4664

Coast Guard Atlantic Area Cmd – 757-398-6390

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S., including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.